

## Satellite P500 Detailed Product Specification<sup>1</sup>

Model Name	Description	Part Number	UPC
<b>P500-ST6822</b>	Genuine Windows® Home Premium 64-bit, Intel® Core™ 2 Duo processor T6600, 2GB DDR2, 320GB 5400rpm SATA, Slot-loading DVD-SuperMulti with LabelFlash®, 18.4" TruBrite® widescreen HD+, Mobile Intel® Graphics Media Accelerator 4500MHD, Webcam, Realtek® 802.11b/g/n Wireless LAN, Modem, 6-cell battery, 1 year standard limited warranty	PSPG0U-01J00P	

### Operating System <sup>C1 2</sup>

- Genuine Windows® 7 Home Premium 64-bit
- Genuine Windows® 7 Ultimate 64-bit (only with 4GB or more memory)
- Genuine Windows® 7 Professional 64-bit

### Processor and Chipset<sup>3</sup>

#### Processor:

- Intel® Core™ 2 Duo processor T6600
  - 2.2GHz, 2MB L2 Cache, 800MHz FSB
- Intel® Core™ 2 Duo processor P7450
  - 2.0GHz, 3MB L2 Cache, 1066MHz FSB
- Intel® Core™ 2 Duo processor P8700
  - 2.53GHz, 3MB L2 Cache, 1066MHz FSB
- Intel® Core™ 2 Duo processor T9600
  - 2.80GHz, 6MB L2 Cache, 1066MHz FSB

#### Chipset:

- Mobile Intel® GM45 Express Chipset

### Memory<sup>4</sup>

- Configured with 2GB (x1) DDR2 800MHz memory
- 2 memory slots
- 1GB (Min)/8GB (Max), with 1GB, 2GB, or 4GB DDR2 memory modules

### Storage Drive<sup>5</sup>

#### Primary storage drives:

- 320/400/500GB (5400 RPM), 320GB (7200RPM) Serial ATA hard disk drive
- 64GB Solid State Drive (Serial ATA, SSD) (Optional)

#### Secondary storage drives:

- 320/400/500GB (5400 RPM), 320GB (7200RPM) Serial ATA hard disk

### Fixed Optical Disk Drive<sup>6</sup>

- DVD SuperMulti drive with LabelFlash® supporting 11 formats
  - Maximum speed and compatibility: CD-ROM (24x), CD-R (24x), CD-RW (24x), DVD-ROM (8x), DVD-R (Single Layer, (8x)), DVD-R (Double Layer, (6x)), DVD-RW (6x), DVD+R (Single Layer, (8x)), DVD+R (Double Layer, (6x)), DVD+RW (8x), DVD-RAM (5x)
  - Use LabelFlash® media to burn high quality labels directly to disc
  - Slot-loading
- Blu-ray Disc™ ROM with SuperMulti DVD±R/RW Double Layer drive (Optional) (Requires discrete graphics if configured with less than 4GB memory)

### Display<sup>7</sup>

- 18.4" diagonal widescreen TruBrite® TFT LCD display at 1680x945 native resolution (HD+)
  - Native support for 720p content

### Graphics<sup>8</sup>

- Intel® Graphics Media Accelerator 4500MHD using 285MB-1341MB dynamically allocated shared graphics memory
- NVIDIA® GeForce® G 210M discrete graphics with 512MB DDR3 dedicated memory (Optional)
- NVIDIA® GeForce® GT 230M discrete graphics with 1GB DDR3 dedicated memory (Optional)

### Sound

- Built-in harman/kardon® stereo speakers
- Built-in microphone

### Input Devices

- 104 key US keyboard with 10-key (Glossy Black)
  - LED Backlight (Optional)
- TouchPad™ pointing device with multi-touch control
- TouchPad™ Enable/Disable
- Media Control Buttons:
  - eco utility button (Energy-saving mode)
  - Mute
  - Media
  - CD/DVD control buttons
  - Volume up, volume down

### Communications

- Integrated Webcam and Microphone
- Modem<sup>9</sup>
- 10/100/1000Mbps Ethernet
- Integrated Realtek WiFi (802.11 b/g/n)<sup>10</sup>
- Intel® Wi-Fi Link 5100AGN (802.11a/g/n) wireless LAN<sup>11</sup> (Optional)
- Bluetooth® version 2.1 plus Enhanced Data Rate (EDR) (Optional)

### Expandability

- 2 main memory slots. Both slots may be occupied.
- ExpressCard™ slot (ExpressCard/34 and ExpressCard/54)
- Memory Card Reader
  - Secure Digital, Secure Digital High Capacity, Memory Stick™, Memory Stick PRO™, Multi Media Card, xD Picture Card [shared slot]

### Ports

- Video
  - RGB (monitor) output port
  - HDMI-CEC
- Audio
  - Microphone input port
  - S/P DIF output port (shared with headphone port)
- Data
  - i.LINK™ IEEE-1394
  - 4 USB v2.0 ports
    - 3 x USB v2.0 ports
    - 1 x eSATA/USB combo port with USB Sleep and Charge<sup>12</sup>
  - RJ-45 LAN port
  - RJ-11 modem port
- Security
  - Slot for Security Lock
  - Fingerprint Reader

### Physical Description

- Fusion Finish™ Sonic Pattern in Black Onyx
  - Edge-to-Edge Display (Optional)
- Dimensions (W x D x H): 17.4" x 11.6" x 1.63"
- Dimensions (W x D x H): 17.4" x 11.6" x 1.69" (with Edge-to-Edge)

- Weight: Starting at 8.7 lbs. (6 cell, 1 HDD), depending upon configuration<sup>13</sup>
- Weight: Starting at 9.3 lbs., depending upon configuration<sup>14</sup> (12 cell)

## Battery<sup>15</sup>

- 4000 mAh (6 cell) Lithium Ion battery pack
- 8000 mAh (12 cell) Lithium Ion battery pack (Optional)

## Power Supply

- 75W (19V x 3.95A) Auto-sensing ,100-240V/50-60Hz AC Adapter
- Dimensions (W x D x H): 5.0" x 2.0" x 1.2"
- Weight: starting at .68 lbs.
- 90W (19V x 4.74A) Auto-sensing ,100-240V/50-60Hz AC Adapter (For models with ATI Graphics)
- Dimensions (W x D x H): 5.2" x 2.3" x 1.2"
- Weight: starting at .81 lbs.

## Software <sup>C1</sup> 16

- Toshiba Software and Utilities
  - Electronic User's Guide
  - Bluetooth Stack for Windows by Toshiba
  - TOSHIBA Resources page
  - TOSHIBA Recovery Disc Creator
  - TOSHIBA ConfigFree®
  - TOSHIBA Disc Creator
  - TOSHIBA DVD Player
  - TOSHIBA Power-Saving Eco Utility
  - TOSHIBA Hard Drive Impact Sensor (3D sensor)
  - TOSHIBA Face Recognition
  - TOSHIBA PC Health Monitor
  - Hard Disc Drive (HDD) Recovery
- Third-party Software
  - Microsoft® Office® 2007 Basic Edition (If purchased at time of system configuration)
  - Microsoft® Office® 2007 Home and Student 2007 Edition (If purchased at time of system configuration)
  - Microsoft® Office® 2007 Small Business Edition (If purchased at time of system configuration)
  - Microsoft® Office® Professional 2007 (If purchased at time of system configuration)
  - Microsoft® Windows Media Player
  - Google™ Toolbar
  - Google™ Desktop
  - Google™ Picasa™
  - Sun® Java™ 2 Runtime Environment
  - Adobe® Acrobat® Reader
  - Core® DVD MovieFactory® for TOSHIBA
  - WildTangent® Orb™ Game Console
- Trial Software
  - Norton Internet Security™ 2009, 30-day trial
  - Microsoft® Office® Ready with Microsoft Office Professional 2007 Edition, 60-Day Trial
- Special Offers
  - Amazon.com - Online Shopping
  - NetZero® Internet Service
  - Skype®
  - Intuit Quickbooks Financial Center 2009

## Environmental Specifications

- This product is RoHS<sup>17</sup> compatible

- Energy Star 5.0 Compliant
- EPEAT™ Gold

	Operating	Non-operating
Temperature <sup>18</sup>	5° to 35° C	-20° to 60° C
Relative Humidity (non-condensing)	20% to 80%	10% to 95%
Thermal Gradient	15° C per hour (max)	20° C per hour (max)
Altitude (relative to sea level)	0 to 3,000 meters	0 to 10,000 meters
Shock	10G	60G
Vibration	0.5G	1.0G

## 1 YEAR STANDARD LIMITED WARRANTY<sup>19</sup>

- Includes International Limited Warranty for obtaining service when traveling outside the United States.

## Service Upgrades and Extensions

Toshiba offers many different enhanced services such as SystemGuard®, On-Site Repair, and ServiceExpress to provide additional support to your notebook PC. For a full description and complete list of programs and program terms and conditions, please visit [www.pcsupport.toshiba.com](http://www.pcsupport.toshiba.com). Accessories For additional and most updated accessories, please visit [www.accessories.toshiba.com](http://www.accessories.toshiba.com)

## Power

Part Number	Description
PA3290U-3ACA	Toshiba 1200W Global AC Adapter
PA3729U-1BRS	Toshiba Primary Li Ion Battery Pack(6 cell)
PA3730U-1BRS	Toshiba Primary High Capacity Li Ion Battery Pack(12cell)

## Memory Upgrade

Part Number	Description
PA3670U-1M4G	TOSHIBA 4GB DDR2-800 Memory Module

## Expansion

Part Number	Description
PA3575U-1PRP	dynadock USB Docking Station with DVI/VGA port
PA3555U-1ETC	Toshiba USB Data Transfer Cable

## Carrying Case

Part Number	Description
PA1447U-1CS8	Toshiba 18.4" Carrying Case (Fits up to 18.4")
PA1453U-1BG8	Toshiba 18.4" Gaming Back Pack (Fits up to 18.4")

## Storage

Part Number	Description
PA3556U-1M2G	Toshiba 2GB USB Hi-Speed Flash Drive, Ready Boost
PA3556U-1M4G	Toshiba 4GB USB Hi-Speed Flash Drive, Ready Boost
PA3556U-1M8G	Toshiba 8GB USB Hi-Speed Flash Drive, Ready Boost
HDDR250E03X	Toshiba USB External 250GB Hard Disk Drive
HDDR320E03X	Toshiba USB External 320GB Hard Disk Drive
HDDR400E03X	Toshiba USB External 400GB Hard Disk Drive
HDDR500E03X	Toshiba USB External 500GB Hard Disk Drive

## Security & Protection

Part Number	Description
PA3611U-1ETC	Toshiba Keyboard Protector

## Wireless & Bluetooth

Part Number	Description
PA3710U-1BTM	Toshiba Bluetooth 2.1EDR USB Adapter

## Subject to Change

While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. For the most up-to-date product information about your computer, or to stay current with the various computer software or hardware options, visit Toshiba's Web site at <http://www.pcsupport.toshiba.com>

## Return Policy

Notwithstanding anything to the contrary in any third party License Agreement or product documentation supplied with your PC, Toshiba America Information Systems, Inc. ("TAIS") does not accept the return of component parts, or bundled software, that have been removed from the PC system. Pro-rata refunds on individual PC components or bundled software, including the operating system, will not be granted. If you wish to return a complete PC system, contact the TAIS dealer where you purchased the product, and comply with the dealer's standard return policies and procedures.

Toshiba America Information Systems, Incorporated ("TAIS")

9740 Irvine Boulevard

Irvine CA 92618

ToshibaDirect website: <http://www.toshibadirect.com>

TAIS website for resellers: <http://sell.toshiba.com>

TAIS PC Support website: <http://pcsupport.toshiba.com>

Qosmio, Satellite, Portégé, Tecra, SelectBay, ConfigFree, SystemGuard, EasyGuard are registered trademarks of Toshiba America Information Systems, Inc. and/or Toshiba Corporation. All other products and names mentioned are the property of their respective owners.

### <sup>C1</sup> **64-bit computing:**

64-bit computing requires that the following hardware and software requirements are met:

- 64-bit Operating System
- 64-bit CPU, Chipset and BIOS (Basic Input/Output System)
- 64-bit Device drivers
- 64-bit applications

Certain device drivers and/or applications may not be compatible with a 64-bit CPU and therefore may not function properly. A 32-bit version of the operating system is preinstalled on your computer unless explicitly stated that the operating system is 64-bit. See "Detailed Specs" for more information.

<sup>1</sup> **Product Series Legal Footnote.** The product specifications and configuration information are designed for a product Series. Your particular model may not have all the features and specifications listed or illustrated. For more detailed information about the features and specifications on your particular model, please visit Toshiba's Web site at [pcsupport.toshiba.com](http://pcsupport.toshiba.com).

**Product Offering Legal Footnote.** Toshiba America Information Systems, Inc. reserves the right to modify or withdraw this offer at anytime without notice

### <sup>2</sup> **Operating System.**

Also see **64-Bit Computing** Legal Footnote, if applicable.

Certain Microsoft® software product(s) included with this computer may use technological measures for copy protection. IN SUCH EVENT, YOU WILL NOT BE ABLE TO USE THE PRODUCT IF YOU DO NOT FULLY COMPLY WITH THE PRODUCT ACTIVATION PROCEDURES. Product activation procedures and Microsoft's privacy policy will be detailed during initial launch of the product, or upon certain reinstallations of the software product(s) or reconfigurations of the computer, and may be completed by Internet or telephone (toll charges may apply).

Some software may differ from its retail version (if available), and may not include user manuals or all program functionality.

**Offers.** Offer terms, duration and product availability all subject to change without notice

### <sup>3</sup> **Processor (Central Processing Unit).**

Also see **64-Bit Computing** Legal Footnote, if applicable.

CPU performance in your computer product may vary from specifications under the following conditions:

1. use of certain external peripheral products
2. use of battery power instead of AC power
3. use of certain multimedia, computer generated graphics or video applications
4. use of standard telephone lines or low speed network connections
5. use of complex modeling software, such as high end computer aided design applications
6. use of several applications or functionalities simultaneously
7. use of computer in areas with low air pressure (high altitude >1,000 meters or >3,280 feet above sea level)
8. use of computer at temperatures outside the range of 5°C to 30°C (41°F to 86°F) or >25°C (77°F) at high altitude (all temperature references are approximate and may vary depending on the specific computer model – please visit the Toshiba website at [www.pcsupport.toshiba.com](http://www.pcsupport.toshiba.com) for details).

CPU performance may also vary from specifications due to design configuration.

Under some conditions, your computer product may automatically shut-down. This is a normal protective feature designed to reduce the risk of lost data or damage to the product when used outside recommended conditions. To avoid risk of lost data, always make back-up copies of data by periodically storing it on an external storage medium. Use your computer product only under recommended conditions. Read additional restrictions under "Environmental Conditions" in your product "Detailed Specs." Contact Toshiba Technical Service and Support for more information.

<sup>4</sup> **Memory (Main System).** Part of the main system memory may be used by the graphics system for graphics performance and therefore reduce the amount of main system memory available for other computing activities. The amount of main system memory allocated to support graphics may vary depending on the graphics system, applications utilized, system memory size and other factors. Computers configured with a 32-bit operating system can address up to 3GB of system memory. Only computers configured with a 64-bit operating system can address 4 GB or more of system memory.

### <sup>5</sup> **Storage Drive (HDD Capacity).**

Computer (Internal) HDD Capacity. One Gigabyte (GB) means  $10^9 = 1,000,000,000$  bytes using powers of 10. The computer operating system, however, reports storage capacity using powers of 2 for the definition of  $1\text{ GB} = 2^{30} = 1,073,741,824$  bytes, and therefore shows less storage capacity. Available storage capacity will also be less if the computer

includes one or more pre-installed operating systems, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary

<sup>6</sup> **Optical Drive.** Due to manufacturing and quality variations in third party optical media (e.g., CD or DVD) or optical media players/recorders, in certain cases, your Toshiba optical drive may not record on certain optical media that bear the applicable logo, or playback optical media recorded by other PCs or optical media recorders. Additionally, certain optical media recorded on your optical drive may not playback or operate properly on other PCs or optical media players. These problems are not due to any defect in your Toshiba PC or optical drive. Please refer to your PC's product specification for listing of specific format compatibilities.

Recording or viewing of certain optical media may be limited or prevented in accordance with applicable copy protection standards.

<sup>7</sup> **Display.** Small bright dots may appear on your screen display when you turn on your PC. Your display contains an extremely large number of thin-film transistors (TFT) and is manufactured using high-precision technology. Any small bright dots that may appear on your display are an intrinsic characteristic of the TFT manufacturing technology. Over a period of time, and depending on the usage of the computer, the brightness of the screen will deteriorate. This is also an intrinsic characteristic of the screen technology. When the computer is operated on battery power, the screen will dim and you may not be able to increase the brightness of the screen while on battery power.

<sup>8</sup> **Graphics (Graphics Processing Unit).**

GPU performance may vary depending on product model, design configuration, applications, power management settings and features utilized. GPU performance is only optimized when operating in AC power mode and may decrease considerably when operating in battery power mode.

**Total Available Graphics Memory** is the total of, as applicable, Dedicated Video Memory, System Video Memory and Shared System Memory. Shared System Memory will vary depending on system memory size and other factors.

<sup>9</sup> **Modem Speed.** Due to FCC limitations, speeds of 53 kbps are the maximum permissible transmission rates during download. Actual data transmission speeds will vary depending on line conditions.

<sup>10</sup> **Wireless-N.** The wireless adapter is based on a draft release version of the IEEE 802.11n specification, and may not be compatible with, or support all features (e.g., security) of, certain Wi-Fi® equipment.

<sup>11</sup> **Wireless-N.** The wireless adapter is based on a draft release version of the IEEE 802.11n specification, and may not be compatible with, or support all features (e.g., security) of, certain Wi-Fi® equipment.

<sup>12</sup> **USB Sleep & Charge.** The "USB Sleep & Charge function" may not work with certain external devices even if they are compliant with the USB specification. In those cases, turn the power of the computer ON to charge the device.

<sup>13</sup> **Weight.** Weight may vary depending on product configuration, vendor components, manufacturing variability and options selected.

<sup>14</sup> **Weight.** Weight may vary depending on product configuration, vendor components, manufacturing variability and options selected.

<sup>15</sup> **Battery Life.** Battery life may vary considerably from specifications depending on product model, configuration, applications, power management settings and features utilized, as well as the natural performance variations produced by the design of individual components. Published battery life numbers are achieved on select models and configurations tested by Toshiba at the time of publication. See "Detailed Specs" for specific battery measurement test. Recharge time varies depending on usage. Battery may not charge while computer is consuming full power. After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries. To purchase a new battery pack, see the accessories information that shipped with your computer or visit the Toshiba web site at [www.accessories.toshiba.com](http://www.accessories.toshiba.com).

<sup>16</sup> **Software.** Some software may differ from its retail version (if available), and may not include user manuals or all program functionality.

Certain Microsoft® software products (including Microsoft Office Small Business Accounting if applicable) included with this computer may use technological measures for copy protection. IN SUCH EVENT, YOU WILL NOT BE ABLE TO USE THE PRODUCT IF YOU DO NOT FULLY COMPLY WITH THE PRODUCT ACTIVATION PROCEDURES. Product activation procedures and Microsoft's privacy policy will be detailed during initial launch of the product, or upon certain reinstallations of the software products or reconfigurations of the computer, and may be completed by Internet or telephone (toll charges may apply).

Internet access is required to enable certain functionality of certain Microsoft products (including Microsoft Office Small Business Accounting 2006) which may be included with this computer.

The Microsoft Office 2007 60-Day Trial software (if applicable) is intended for evaluation purposes only. You must activate the software before you can use it. Product activation procedures will be detailed during initial launch of the software; activation requires Internet access. This software has an expiration date of 60 days from date of first use, at which time the software will operate under reduced-functionality mode, limiting end-user options and operations. The Microsoft Office 2007 60-Day Trial software is distributed without charge to the End User Customer but if the End User wants to continue to use such product after the trial period, then the End User Customer will have to pay a fee for the perpetual version of such Office Product.

<sup>17</sup> **RoHS.** This notebook is compatible with European Union Directive 2002/95/EC, Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS), which restricts use of lead, cadmium, mercury, hexavalent chromium, PBB, and PBDE. Toshiba requires its notebook component suppliers to meet RoHS requirements and verifies its suppliers' commitment to meeting RoHS requirements by conducting component sampling inspections during the product design approval process.

<sup>18</sup> **Temperature (Environmental) Conditions.** All temperature references are approximate and the performance of your computer may vary from specifications even when operating within the recommended temperature range.

<sup>19</sup> **Warranty.** The terms and conditions of Toshiba's standard limited warranty are available at [www.warranty.toshiba.com](http://www.warranty.toshiba.com).